MEDICAL SCIENCE

AND THE

MEDICAL PROFESSION

IN

EUROPE AND THE UNITED STATES.

AN INTRODUCTORY LECTURE,

BY HARVEY LINDSLY, M. D.,

PROFESSOR OF OBSTETRIC MEDICINE IN THE COLUMBIAN COLLEGE.

November, 1840.

WASHINGTON:
PETER FORCE, TENTH STREET.
1840.

REMARKS

ON THE

PRESENT STATE OF MEDICAL SCIENCE.

To a mind imbued with the spirit of philosophical research: fond of tracing the history and analyzing the causes of the successful prosecution of science by one people, and its indifferent cultivation, or its comparative neglect, by another, a subject could hardly be presented of more interest than an examination of the present state of medical science in different parts of the world: observing, here, its steady growth and enduring usefulness—there, its rapid progress and brilliant improvement; in some, its melancholy declension and degraded condition—and in others, its late appearance and tardy development, now just springing into life, and strength, and beauty. It is interesting, too, to see how perfectly the peculiar intellectual characteristics of different nations are exemplified and illustrated in the particular improvements and discoveries made by them, respectively, and to trace the connection, more or less direct, between the habits, manners, and even the forms of government of different countries, and the particular modes in which the science of medicine has been advanced, and the

various branches of the profession which have been most successfully cultivated by them.

I propose, therefore, gentlemen, on the present occasion, to present you a few brief and general remarks on the present state of medical science and the medical profession, in different parts of Europe, and, by way of contrast, to add a similar sketch of its condition in our own country.

The most superficial acquaintance with the history of medicine will be sufficient to convince every inquiring mind, that there is no little diversity in its condition, its degree of advancement, the modes of administration of remedies, the state of perfection to which its different branches have been carried by various nations, even where, perhaps, on the whole, there is a striking equality in its general prosperity and relative progress. Indeed, there is hardly a greater variety in the scenery, the natural appearance, the physical conformation of different countries, than there is in the intellectual and moral character of their inhabitants. There is, for example, scarcely a stronger contrast between the foggy atmosphere, the damp air, the perpetual verdure of England, and the sunny fields, the brilliant sky, and the arid plains of France, than there is in the grave, energetic, persevering character of the Englishman, as contrasted with the versatile, active, and restless spirit of the Frenchman, while the characteristic features of German scenery and German character differ essentially from both.

Now, all these distinctive traits of national habits and national peculiarities are equally marked in the development and progress of medical science. The various improvements—the particular branches of the profes-

sion in which the greatest discoveries have been made—the character of the remedies—their mode of administration—the skill displayed in surgical operations, and the frequency of their application—the constant changes and improvement of surgical instruments—the discoveries in physiology, pathology, and pharmaceutic chemistry—all these will be found to be different in those countries of Europe which have accomplished most for the advancement of the profession, and are just such as we would naturally and *a priori* expect from the peculiar intellectual and moral organization of their inhabitants.

For instance, the grave, sedate, philosophical, utilitarian character of the English leads them, as a matter of course, to aim at *direct* results in their endeavors to benefit their fellow-men; and hence the most judicious and best informed of the British practitioners, placing but little value upon theory, and caring but little whether they can or cannot EXPLAIN the modus operandi of a remedial agent, have directed the whole force of their well-disciplined minds to the collection of *facts*. They have observed closely, and recorded accurately and minutely, the effects of medicine and medical treatment upon disease, and have been more anxious to apply, with judgment, skill, and success, the remedies already known to us, than to discover new ones. They have watched, with sleepless vigilance and indefatigable perseverance, the evanescent and ever-changing hue of disease, and have endeavored to meet and subdue it, in all its Protean forms, by a corresponding and appropriate modification of medicinal applications. They seem to have adopted, in all its force and extent, the princi-

ple that, as in agriculture, he who can make two blades of grass grow where but one grew before confers a greater favor on mankind than the most eloquent declaimer on the advantages and beauties of agricultural pursuits: so, in medicine, that he who can save one life, under circumstances which before were considered necessarily fatal, or can assuage one pain that was never soothed before, has reared a monument to his fame, more lasting than was ever constructed of brass or of marble, and has laid his compatriots and posterity under greater obligations than if he had invented a hundred theories,

> ——— "built
> Of gossamer upon the brittle winds,"

as brilliant, as short-lived, and as useless, as those of Cullen, or Brown, or Broussais.

This practical, health-giving tendency of British medicine is exemplified in a great variety of ways, and has exerted, as a proper spirit of rational experience always does, a most beneficial influence on the treatment of disease—rendering it more philosophical, and, at the same time, more accurate, precise, and efficient. Nothing is taken for granted, or upon authority, but every remedial measure is subjected to the most careful, prolonged, and searching scrutiny. As a natural consequence, the practice has become more simple, and has been freed from many of the irrational and almost ludicrous compounds which still disfigure and disgrace the pharmacopœias of Continental Europe. These are still encumbered with many complex formulæ, which English and American physicians have long since simplified, and many inert articles which they have long since rejected. There is, I think, no doubt that the treatment of dis-

ease in Great Britain and this country is much more effective, prompt, and successful, than in France or Germany. Reliance is there frequently placed on remedies which are quite inert, or, perhaps, wholly useless, and upon dietetic regimen, which can have but little effect in controlling the course or abridging the duration of disease.

I ought, however, to add, in justice to French and German physicians, that the difference in the climate and the habits of the people produce a striking difference in the nature and violence of their diseases, and that a much more active treatment is imperiously demanded in England than on the Continent. An Englishman's constitution, like his mind, is peculiarly massive. He eats heartily of the most substantial food, and partakes freely of stimulating drinks. He is surrounded by a most luxuriant vegetation, and lives in a mild and salubrious climate. The sea air, and foggy, moist atmosphere, sharpen his appetite, and enable him to digest whatever food, however gross or plentiful, his inclination may prompt him to take.

All these circumstances render him more robust, and more liable to violent inflammatory attacks, than the comparatively feeble inhabitant of the Continent, and enable him to bear, and, indeed, to demand much more active medical treatment. Hence, too, larger doses of medicine are required to produce a given effect in England, than in France or Italy: a drachm or two of Epsom salts, for example, being the ordinary quantity prescribed in the latter countries, while, in the former, four or five times that amount is needed. That this singular difference in the operation of medicine is the

compound effect of climate and general vigor of constitution, is evident from the further curious fact, that an Englishman in Germany requires less medicine than at home, although still more than the native—thus forming a medium between his former habits and those of the people around him. The same principle is exhibited in the operation of medicine on the inhabitants of the Continent, when in England—their former doses being there quite inert and inefficient. These remarks are particularly applicable to purgatives and opium, with regard to which the experiment has frequently been made; and I have no doubt that further observation will show it to be true of most, if not all other medicines.

The diseases of our country partake largely of the violent inflammatory character of those of England, attributable, no doubt, to the variableness of our climate, its sudden and unexpected changes of temperature, and the more substantial and abundant fare universally enjoyed by our citizens. It is natural to suppose that the peasant of Europe, who tastes of animal food, probably, but once a week, and lives the rest of the time on watery, innutritious, vegetable aliment, should be subject to a class of diseases very different in their nature, and requiring, in their treatment, a very different course, from the hardy, robust American, who eats abundantly of animal food, perhaps three times a day.

After making all due allowances, however, on account of difference of climate and constitution, I still believe there is less efficiency, and, therefore, less skill exhibited, in the treatment of disease on the Continent of Europe, (with, perhaps, a few exceptions, to which I shall hereafter refer,) than in Great Britain or this country.

England has done and is doing much for medicine. Some of the most important discoveries in anatomy, and not a few of the most valuable improvements in practical therapeutics, owe their origin to the indefatigable industry and far-reaching genius of English physicians. If she cannot claim here the same proud pre-eminence that her poets, her orators, her statesmen, and her generals, have won for her in other walks of intellectual exertion, it is not because her physicians have fallen behind, but simply because those of France and Germany have outstripped their own compatriots in the race for honor and distinction. Her Harveys, her Jenners, her Hunters, her Cullens, and her Davys, may well demand to be considered fellow-countrymen of Shakspeare and of Milton, of Newton and of Marlborough, of Burke and of Chatham, whether we consider the magnitude of their labors, the usefulness of their efforts, the splendor of their discoveries, or the brilliancy of their genius.

Indeed, I do not know a name, on the proud roll of British greatness, which has a higher claim to the admiration of the world, or a stronger title to be regarded a man of pre-eminent genius, than John Hunter.

The present state of the medical profession in England, although it boasts many men of great distinction, who are fully entitled to fill the places once occupied by Hunter and his compeers, is still in need of reformation. The division of the profession into three distinct classes—Physicians proper, Surgeons, and General Practitioners, or Apothecaries, as these latter are sometimes called—is unquestionably unfortunate.

This arrangement seems to be carried out to the fullest extent in London. There are in this capital of the world nearly or quite three thousand members of the profession, including the three divisions. In the first class—the highest in rank, and, as a general rule, the first in science and skill—are the Physicians proper, all of whom are fellows or licentiates of the Royal College of Physicians; and, in order to be admitted to this honor, they must be thoroughly educated men, and all candidates for Fellowship must have previously been members of the Universities of Cambridge, Oxford, or Dublin. The College of Physicians was founded in the reign of Henry VIII, and possesses very ample powers for the control and supervision of medical men and the profession generally, though it has not for a long time exercised these high attributes to any considerable extent, except for the regulation and admission of members into its own body. The number of its fellows is very limited, amounting only to about four hundred and fifty; very little more than one-seventh of the profession of London. They take a high rank as gentlemen, as men of science and general learning, and as skilled in their profession; and they command the most lucrative and valuable business in the metropolis. They do not practise surgery, except incidentally.

The Royal College of Surgeons is also a highly respectable body; being composed of men who are subjected to a pretty thorough ordeal before they are admitted to its honors, though they are less exclusive, and insist less upon a complete classical education, than the College of Physicians. The members of this institution practise both medicine and surgery, and are

much more numerous than the former body; comprising, I believe, about two thousand members.

The College of Surgeons was established as a special corporation, by an act of Parliament, in 1745. It was afterwards dissolved, and the present College was founded in 1800, for the promotion of surgical science, and for the examination of surgeons for the Army and Navy. This institution has now attained a very high character, and includes among its fellows some of the most distinguished members of the faculty in London—men whose reputation is known and appreciated wherever medical science is cultivated. They possess a handsome and extensive building; a valuable library of twenty-five thousand volumes, and the famous Hunterian Museum, which was presented to them by Parliament, and which forms one of the richest and most instructive collections in the world. They publish occasionally a volume of Transactions. The income arising from fees for examinations, and the interest of legacies and other species of capital, is about eleven thousand pounds per annum.

The third and most numerous portion of the profession in England is embraced under the name of "the Society of Apothecaries," or General Practitioners. They were united into one corporation in 1815. They possess very considerable powers, and practise in every department of the profession. They do not charge for their professional services, but only for the medicine they furnish; and hence, as the expense of employing them is very much less than that of the other classes of the profession, they have a large amount of business among the middling and inferior portions of the com-

munity, who cannot afford to pay the high fees demanded by their more elevated and scientific brethren. The Society of Apothecaries exercises an oversight of all medical articles exposed for sale. It has a regular Board of Examiners, and issues licenses to all the general practitioners; that is, to all those who sell or deal in drugs, and at the same time practise medicine. They possess a large building, called Apothecaries' Hall, where medicines are prepared and compounded on a large scale, and whence they are exported to every part of the world, and, owing to the high scientific and practical character of the Association, are in great demand. There is still a class of apothecaries below this, called chemists or druggists, who do not practise at all, and whose only business is the purchase and sale of medicines. The members of the Society of Apothecaries are regarded as an inferior class of the profession. They cannot fill the elevated post of physicians or surgeons to the hospitals, nor will any amount of scientific or professional learning or skill entitle them to the immunities and privileges of the Colleges of Physicians or Surgeons, without undergoing the usual previous examination; yet they have occasionally had among them some of the brightest ornaments of British medicine. The celebrated John Mason Good was not technically entitled to the name of physician until past the meridian of life, and until after he had written several of his most able works; and Dr. Armstrong was rejected, on his first application for admission into the Royal College of Physicians, although then a practitioner of several years' standing, and an author of no little celebrity.

This whole system of the division of the profession in England into different and distinct classes is evidently unfortunate. It is wrong in theory and injurious in its practical results. It necessarily and unavoidably leads to jealousies, difficulties, and contests, among the different portions, while it presents an insuperable bar to that unity of feeling and concert of action so indispensable in cities, to enable the profession to accomplish many of its most important undertakings. The division into physicians and surgeons, even where there is no difference in the relative rank of the two branches, is of itself injurious; as its tendency is to lead the respective divisions to cultivate too exclusively their peculiar subjects, to the neglect of that universal acquaintance with the whole science of medicine which is indispensable to make a thoroughly skilful practitioner. Not that I am opposed to a classification of duties and objects among medical men in large cities—for I consider this classification and devotion to particular branches, where the population is sufficiently dense to justify it, as among the greatest improvements of modern medicine, and one which has already led to the happiest results—but I speak of the injurious effects of carrying the classification into professional *education*. Here there should be no physicians or surgeons, no aurists or oculists; but the student should be thoroughly grounded in the elementary principles of every branch of the profession, and afterwards he may devote his time and attention to any one of them which his taste or position may enable him to cultivate to the greatest advantage.

But there is, if possible, a still stronger objection to

the third and last division of British practitioners; and that is, that they are inferior, in point of rank and social consequence, to the other two—thus giving rise to continual contests for precedence on one side, and as constant opposition to this claim of superiority on the other, and placing unnatural and artificial barriers to the elevation of merit and the reward of industry and ability, and throwing all these obstacles, too, in the way of what is, after all, the most important, because the most numerous part of the profession. I consider this whole system as much inferior, in point of simplicity and adaptation to the advancement of medical science, to the one adopted in this country, where (whatever other defects may exist in our professional regulations) all are placed, in consonance with our republican institutions, on terms of perfect equality, and the most unrestricted competition allowed for the struggles of industry and talent.

But, notwithstanding all these defects in their system of arrangement, English physicians have acted well their part, and nobly sustained the reputation of their country for pre-eminence in scientific pursuits. Two of the most brilliant discoveries that have ever graced the annals of medicine have been made on British ground—the circulation of the blood, which may be considered the foundation of all accurate knowledge of the fluids of the body, and which is destined to exert the most important influence on medical researches to the end of time; and the prevention of the ravages of that most destructive of diseases, the small-pox, by the introduction of the vaccine virus. Nor were these discoveries, as might at first be supposed by the casual,

inattentive reader of medical history, effected by mere accidental coincidences, without design, and therefore without merit on the part of their authors. On the contrary, they were the result of patient thought, of persevering experiment, of pure philosophical induction, and of the application of brilliant, far-reaching powers of mind, hardly inferior to the almost superhuman genius of Newton or of Davy. These two discoveries alone, if England had done nothing more for the promotion of medical science, are sufficient to entitle her to the everlasting gratitude and veneration of physicians and the world.

But these do not comprise all her claims to our admiration and respect. One of her gifted sons has, within a few years past, made discoveries in the anatomy and functions of the nervous system; having succeeded in demonstrating that the nerves of motion and sensation are wholly distinct, and thus enabling us to solve many an enigma in pathology and physiology which before were utterly incomprehensible. The discovery of the "nervous circulation," as this has been very appropriately called, will carry the name of Sir Charles Bell to the remotest posterity, along with those of Harvey and Jenner, as among the most brilliant contributors to the advancement of medical science.

English physicians, too, are every day making improvements which, though less striking than these, and less calculated to dazzle the imagination than those of their continental neighbors, are still of the highest importance in practical medicine. The peculiar characteristics of English medicine are—more philosophical views of disease; a more rigid observance of facts;

a more skilful application of remedial measures; a more energetic and decisive practice; a more watchful care of the patient; and a more accurate and searching scrutiny into the effects of remedies. These traits are all more or less observable in the works of Abernethy, Cooper, Marshall Hall, Armstrong, Abercrombie, Sir Charles Bell, and others. These men have effected as much for the cure of disease, and the relief of human suffering, as Louis, Majendie, Bichat, or Broussais, though they may have exhibited less of those brilliant coruscations of genius which often dazzle and bewilder, rather than enlighten and benefit mankind.

The most important defect in the system of medical investigations now pursued in England is the comparative neglect of pathological anatomy, although even here, perhaps, they are doing as much as could reasonably be expected of their limited opportunities. The means at their command are vastly less than those enjoyed by their rivals of the French metropolis, owing to the difference in the national feelings, and the much smaller number of patients in their hospitals. Parliament has, however, recently passed a wise and liberal law in relation to this subject, which removes some of the obstacles and difficulties in the way of a successful prosecution of this important part of medical study; and we may therefore hope that hereafter new zeal and new efforts will be put forth in its pursuit.

FRANCE.

The organization of the profession in France is in many respects different from that of England. Before the Revolution of 1789, there were here eighteen col-

leges, with the power to confer the degree of Doctor of Medicine, which was then easily obtained, and in fact was often an article of traffic. Subsequently, amid the wreck of every literary and scientific institution and pursuit, anarchy and chaos reigned in medicine. During the third year of the Republic, (1794,) when wiser counsels began again to control the affairs of France, three medical schools were founded, at Paris, Strasburg, and Montpelier, and by these the degree of Doctor of Medicine still continues to be conferred. The requisitions for graduation are somewhat extended—inferior to those demanded for fellowship by the College of Physicians of London, but still in advance of those of the great mass of the profession in England and in this country. The applicant must have received a thorough academical education—must have taken a diploma from the faculty of letters, and another from the faculty of sciences—which imply a pretty extensive course of literary and scientific reading—and, finally, he must have been a student of medicine for four years, and have attended at one of the universities for a considerable portion of that period.

The Academy of Medicine, in obedience to a requisition upon them for that purpose by the Minister of Instruction, have recently made a report to the Government, in which they recommend several alterations in the existing regulations for medical instruction. In order to meet the increased demand for education, they propose to establish three additional faculties—one in Lyons, one in Nantes, and one in Toulouse or Bordeaux. To obviate all suspicion of interest or partiality, they propose that the examiners shall not be taken from the

officers of the college only, but that one-third shall be chosen from among the medical personages in the vicinity. All secret remedies of quacks are to be abolished, and patents for nostrums issued only upon approval of the same by the Academy of Medicine; the remedy to be *new* and *useful;* to be kept for sale at the regular drug stores, and, after the expiration of the patent, the composition of the medicine to be made public.

Within the last thirty years, the medical profession in France have made rapid advances in general respectability, scientific knowledge, and real utility. They have, with all the characteristic ardour and enthusiasm of their national character, devoted their talents and their time to the advancement of medical science, and certainly no nation has accomplished more during that period. Some of the most brilliant and the most useful of the modern improvements in our profession owe their origin to the talents, the zeal, and the industry of French physicians. In pharmaceutic chemistry, in the number of the valuable articles which they have either discovered, or whose ultimate principles they have analyzed, and thus rendered much more easy of administration, and much more effective in operation, they are unrivalled. To them we owe the introduction of quinine—a beautiful and efficient article in the place of the bulky and nauseous Peruvian bark—one of the most important improvements in modern therapeutics, because an article in universal use, and one for which our countrymen should be particularly grateful, since, owing to the peculiarity of our diseases, there is greater demand for it here, I believe, than in any other part of the world.

The universality of its employment may be judged of from the fact, that in 1826, within six years of its discovery, no less than 59,000 ounces were manufactured in two laboratories alone in Paris.

To French medicine, too, we owe the discovery of iodine—another most valuable and potent remedy, which has been introduced and extensively used wherever medical science is cultivated. The preparations of morphia, which have disarmed opium of some of its most noxious properties, and which can be administered with safety and advantage to many a susceptible and nervous temperament, which could not bear for a moment the original drug itself, are another gift from French chemistry. These, with many minor, but still important additions to our therapeutic means of controlling disease, have laid us and our patients under lasting obligations to the physicians of France. But improvements in pharmacy are not all that they have accomplished for the advancement of our profession and the benefit of mankind. So long as consumption shall continue its ravages, and annually consign its thousands and tens of thousands to a premature grave, so long will the labors of Corvisart, of Laennec, and of Louis, be held in grateful recollection, and their memories be cherished as among the most efficient benefactors of the human race. By means of auscultation and percussion, they have rendered our knowledge of the diseases of the chest much more accurate and precise. We are no longer obliged to grope our way amidst the thick darkness which formerly enveloped and obscured our path, but by the aid of these powerful means of diagnosis, combined with a careful study

of the ordinary symptoms of disease, these hitherto intricate and puzzling affections are revealed to our view, and we can proceed in our therapeutic course with the confidence of knowledge and the certainty of science; even where, as frequently happens, our skill is baffled, and death still claims his accustomed victim, we can at least have the consoling assurance that we have not mistaken the case, and have been able to alleviate its symptoms and retard its progress.

In addition to his improvement of percussion and auscultation, as applied to affections of the chest and the abdomen, Louis, who now ranks among the first of living authors,

> "Ascending where the laurel *highest* waves
> Her branch of endless green,"

has invented the numerical method, by which, to a considerable extent, mathematical accuracy and precision can be obtained in its treatment. This is another great boon to the profession, and is another instance of how much may be accomplished by a single individual, when his efforts are sustained by industry and guided by genius. Louis studied and practised in Russia from his 17th to his 33d year: while there engaged in the ordinary duties of his profession, the reflection often crossed his mind, that medical theories were not sufficiently sustained by carefully observed facts—that the former were abundant, and frequently incorrect, while the latter were few in number, and deficient in precision. Louis, therefore, with all the enthusiasm and zeal of real genius,

> ——— "that often sees the distant tops of thoughts
> Which men of common stature never see,"

determined to devote himself as closely as possible to

pure and simple observation. He gave up practice—returned to Paris—entered one of the wards of La Charité, and, with the single heartedness of a hermit and the devotion of a martyr, bent all the powers of his energetic and brilliant intellect to the accomplishment of his purpose. He passed from three to five hours daily in the hospital, and each post mortem examination occupied him at least two hours. He collected the histories of 1,960 cases, and the post mortem appearances of 358. These formed the basis of his celebrated work on consumption, and at once raised him to the highest rank among medical philosophers.

His careful observation of apparently trifling minutiæ at first excited the ridicule of men who could not comprehend the extensive bearing of his observations, or understand how they were intended to lead to important truths. But when he came before the public with his array of facts, most carefully noted—his tables most scientifically arranged—his deductions most logically drawn, opposition was at once silenced, and scepticism convinced—and the numerical method was generally received as philosophical in theory and useful in practice.

By this method, "Louis has not so much made complete discoveries, as shown the proportions in facts already known; he has not so much discovered new truths, as settled old ones conclusively. For this purpose, he adopts the course pursued in mathematical and physical sciences. Like a meteorologist, he observes the symptoms of a patient, notes them, arranges them in a tabular form, compares them, deduces his results from the calculation, and the average number gives the newly discovered truth."

Modern surgery, too, is greatly indebted to France. The ingenuity and versatility of the national character are favorable to the invention of new and the improvement of old surgical instruments, as well as to the contriving and performing novel modes of operating. Lithotrity, which was first practised in Paris, is unquestionably one of the greatest improvements of modern surgery, whether we consider the inventive genius displayed in its conception, or the immense utility to be expected from its general adoption. It relieves humanity of one of its most excruciating diseases, and by a mode which, contrasted with all former means of cure, is comparatively pleasant and positively safe.

The great glory of French medicine, however, is unquestionably her pathological anatomy. Here she is without a rival, and here have her proudest trophies in the advancement of science been obtained. The peculiar character and manners of her people; the recklessness of life, and the frequency of suicide, (one in one hundred deaths;) the vast number of those who die in their hospitals, amounting to six thousand annually; and the national freedom from prejudice in relation to post mortem examinations, have afforded facilities for the pursuit of pathological anatomy such as are furnished by no other country; and nobly have her physicians improved these opportunities. By their untiring zeal; their ceaseless industry; their unerring accuracy; their admirable adroitness; aided by new and well adapted instruments, and novel and skilful modes of dissection, they have carried this important branch of medical science to a perfection hitherto unattained and almost unhoped for; and have thus been able to make the most

valuable discoveries, and contribute most essentially to the advancement of professional knowledge. In this wide and interesting field of medical research, England, although she can boast of a Hunter, a Monroe, and a Baillie, is left at an immeasurable distance in the rear, when we compare their labors and their results with those of Andral, Bichat, Louis, and a host of others whose names are known and honored wherever science has established her sway.

But after having said thus much in favor of French medicine, I should not do them impartial justice, or convey a correct idea of their merits as practitioners, if I did not reverse the picture, and exhibit their deficiencies. For, after all their brilliant discoveries in physiology and pathology, their valuable additions to pharmaceutic chemistry, and their useful improvements in operative surgery, there are still defects in their mode of treating disease—that last grand object of all our efforts—that may well excite our surprise, and which presents another proof of the fact, that nations, like individuals, cannot excel in every thing at the same time. The Frenchman seems to forget his patient while studying his malady, and is hence more anxious to understand the one than to relieve the other. In his solicitude to form a correct diagnosis, and then to be able to demonstrate its correctness, it seems as if he would be *almost* willing to let his patient die, that he may have it in his power to show, by a post mortem examination, that he understood the case; or, in other words, that his devotion to the pursuit of pathological anatomy is so intense and so absorbing that the practitioner forgets

that this is only valuable as it affords means of subduing disease, and is almost induced to regard it as the grand object to be aimed at in all his inquiries. The *extreme* attention, therefore, which is given to this subject, like extremes in almost every human pursuit, while productive of much good, is also the cause of some evil.

There is another source of error in French practice, which seems to arise from a defect in the national character; and that is, the want of the power of generalization. The Frenchman confines himself too much to the consideration of the subject or the fact immediately before him; he does not sufficiently regard its connection with other facts; he does not analyze its nature; he does not look back to its remote causes, or forward to its ultimate consequences; and hence, in the treatment of disease, he does not sufficiently examine the close and intimate sympathies, the constant and indissoluble connection between different parts of the body. He is too apt—instead of considering the human frame as one undivided, inseparable whole, whose various organs are harmoniously united and mutually dependant upon each other—he is too apt to confine his attention to that portion or that tissue which is primarily and principally diseased, while other parts, suffering incidentally or from sympathy, are entirely disregarded. Hence, too, he seems incapable of appreciating those continual changes, those nicer shades of difference which disease is continually assuming, and is therefore incompetent to adapt his remedies to this ever-varying hue, and without which no man ever became a really skilful and successful practitioner.

GERMANY.

Next to England and France, there is no country in Europe so well calculated to interest the general scholar or the scientific physician as Germany. Her splendid and extensive universities, with their magnificent libraries; their distinguished professors; their immense collections in anatomy, zoology, and natural history; and all the various *materiel* for illustration and instruction—all these extraneous advantages, superadded to the indefatigable industry, the energetic disposition, and sturdy good sense of the national character, all combine to form a picture, the contemplation of which is well fitted to interest as well as instruct us.

Until the commencement of the present century, Germany had not done much to advance our profession; but within the last thirty years, medicine, with the associate branches of chemistry, botany, mineralogy, zoology, &c., have been cultivated with great ardor and distinguished success—and many medical men have arisen, whose names are known not only throughout Europe, but wherever learning is honored or science cultivated.

Physiology and anatomy, human and comparative, are the departments in which German physicians have accomplished most. The names of Blumenbach, Camper, Ludwig, Meckel, Tiedemann, Wenzel, Wrisberg, and Jacobson, are among the most celebrated—and they are quite sufficient to place their native country high on the roll of professional distinction. The immense and most valuable collections of Blumenbach and Meckel, in human and comparative anatomy, are unrivalled, and exhibit a degree of industry and perse-

verance in their acquisition, never equalled, except, perhaps, by the splendid museum of John Hunter.

The other branches of our profession, however, have not been cultivated to the same extent or with the same success as anatomy and physiology. The really valuable and practical works on the treatment of disease are few, compared with those which have been published in England; and hence, too, less progress has been made in adopting the improvements of modern medicine from other countries, than might have been expected from the literary taste and extensive acquirements of German physicians. Auscultation, percussion, and lithotrity, for example, are comparatively but little known and seldom practised in Germany. Lithotrity, it is said, has never been performed except in Berlin. While, at the same time, we must admit their oculists to be among the most skilful and dexterous in the world; and that their surgeons have taken the lead in operations for relieving deformities of the face, particularly the loss of the nose; for the cure of club foot, and the removal of squinting. These are operations of great importance, and at the same time of great beauty and simplicity, and are indicative of profound anatomical knowledge, as well as great mechanical ingenuity on the part of their inventors.

The peculiarly imaginative and mystic character of the German mind, presenting a most singular compound of energy and weakness, as exhibited in the wild and fanciful speculations of her writers on theology and intellectual philosophy, has also pervaded to a great extent the productions of her physicians, and thus genius and industry have lavished on useless theories

and short-lived hypotheses those exertions which, if directed to practical results, might have been productive of the most beneficial consequences and the most important improvements.

The principal defects in the practice of German physicians are their adherence to old, complicated and comparatively useless formulæ, their devotion to fanciful theories, and their ignorance or neglect of the improvements of other countries. These errors are, however, gradually disappearing; and, much as they have already accomplished, we may expect still more valuable improvements and still more brilliant discoveries, from their energy of character and their devotion to science, aided as they are by the efficient patronage of Government, in collecting libraries, establishing museums, endowing hospitals, and in every other mode by which learning can be promoted or genius fostered.

With the exception of France, Germany, and Great Britain, Europe offers but little to interest the student of medical history. Italy, where

> "Soft zephyrs blow—eternal summers reign,
> And showers prolific, bless the soil—in vain"—

Italy is but a splendid ruin—presenting, in her dilapidated palaces, her falling aqueducts, her prostrate columns, her impoverished soil, a striking and vivid picture of a similar declension from her former elevated rank in literature, science, and the arts. There are, however, some rays of her former genius still lingering over this oppressed and degraded land, which occasionally send a gleam of light and beauty across her benighted horizon. There are still some bright spirits, emulous of the former glory of her orators, her war-

riors, her painters, and her sculptors; and among these our profession boasts its full share. But, notwithstanding a few illustrious names, as Scarpa, Caldani, Rolando, Tommasini, and others, who have done what genius and learning and industry could do, to elevate their profession and benefit mankind, the great mass of medical men seem to partake of the torpor and degradation which an oppressive and tyrannical Government, with an iron hand, is inflicting upon the rest of their countrymen.

There are several universities, however, where medicine, in connexion with other sciences, is cultivated, and some of which display a commendable activity in the collection of medical libraries and anatomical museums. This is particularly the case at Florence, which possesses a splendid, and, I believe, an unrivalled collection of wax preparations, (the result of the inimitable labors of Fontana,) and at Pavia, where Scarpa, one of the first oculists of the age, was recently professor. But the practice of medicine is very defective; and owing, in part, to the jealous restrictions and rigorous censorship of the Government, they know but little of the improvements of other countries, and hence some of the most important discoveries of the day are not known, or at least not practised, in Italy.

In the immense Empire of Russia, with her semi-barbarous and scattered population, science, as if chilled by her Arctic snows and Siberian blasts, scarcely manifests enough of vital warmth or genial vigor to indicate a torpid existence. Spain and Portugal, priest-ridden, ignorant, and degraded, present nothing to interest or detain us; and Sweden and Denmark, while

they have made some valuable contributions to literature and the arts, have done little or nothing to elevate or advance the medical profession.

Of *our Country*, what shall we say? Has she accomplished all that might have been expected from the energy of her people and the freedom of her institutions? With the most unrestricted liberty of prosecuting whatever studies or engaging in whatever pursuits our genius or inclination may prompt us to, and the certainty of being rewarded in proportion to our deserts, have *we* done *all* that might be reasonably expected of our opportunities and our inducements? Have we made such discoveries in anatomy and physiology, such improvements in surgery and therapeutics, such exhibitions of skill in pharmacy and chemistry, as are likely to transmit our names with honor to posterity? Have we contributed our full share to the illustration of disease—to the extension of the materia medica—and to the introduction and employment of new and valuable remedies? Have we done all that we might towards the investigation of our peculiar national epidemics? Have we thoroughly studied and completely mastered the additional means of controlling disease, afforded by the various indigenous plants of our extensive country?

Alas! I fear that all of these questions cannot be answered in the affirmative. I fear that it will be found, on investigation, that profound, original, persevering inquiry has not been the *forte* of American physicians; that American medicine, like American literature, has been too ready to rest satisfied with drinking at the streams which have flowed so copiously from European sources, rather than resorting to the fountain-head of

science and of truth, and there drawing for ourselves of its pure and abundant waters. But this dependance on foreign aid, and resort to foreign authors for our principles in science and our standards in literature, (for, however humiliating the confession, it cannot in candor be denied,) is not greater, if as great, in medicine, as in many other walks of intellectual exertion. And, besides, we have, in the peculiar disadvantages of our position, as compared with our European brethren, a much more satisfactory excuse for our deficiencies than can be pleaded by the rest of our countrymen. Their crowded, ill-ventilated, and overgrown capitals, with their degraded and sickly populace, offering every facility for the study of disease—their numerous and well-filled hospitals, affording ample means for pathological investigation—their ancient and wealthy universities, with their extensive apparatus, splendid museums, and immense anatomical collections, furnishing to the student and the practitioner the most abundant materials for reference and improvement—and the extremely minute division of the various departments of our profession, which their dense and crowded population justify and require, and which, like division of labor in every other pursuit, necessarily leads to greater dexterity and skill—all these advantages, and others that might be enumerated, are sufficient to account for the greater perfection which some departments of medicine have attained in Europe, without indicating a want of talent, or deficiency of industry, on the part of American physicians.

But, however this may be, the claims of the profession in this country, on the gratitude and support of the

public, are neither few nor trivial. They have done as much, perhaps more than could reasonably have been expected of them, considering the disadvantages under which they have labored. The genius of our people, like that of our institutions, is essentially utilitarian, looking to useful, substantial, durable results, rather than to splendid display or brilliant exhibition. Hence the attention of American physicians has been devoted chiefly to close, scrutinizing, accurate, observation of disease, and the obscure and complicated effects of remedies in controlling and relieving it, rather than to researches in pathology, physiology, or pharmacy, where our opportunities for discovery, compared with those of European physicians, have been limited and scanty, and where the beneficial results, even when successful, are not so immediate or obvious.

Like the English, for the last forty years, we have aimed at the improvement of what is old, rather than the discovery of what is new. We have endeavored to apply, with greater skill and more accurate adaptation, means and remedies already familiar to us, than to waste our time and our energies on doubtful experiments, which might, after all, prove worthless or injurious. We have preferred to devote ourselves to the investigation of disease, as it is presented to us every day at the bed-side of our patients, rather than to anatomico-pathological researches into the alteration of structure, or the change of tissue, which, though highly important to be understood, cannot yet lead us at once to more correct practice or more successful efforts. And in surgery, while not many new principles have been introduced, or many new operations devised, we have stu-

died with care, and practised with skill, whatever ancient or modern operators have made known to us.

And here I would remark, in justice to ourselves, that after considerable attention to the subject, I am satisfied there is no country where the inventions, the improvements, and the writings of medical men, of other countries, are so soon or so generally known as among us. Freed from the rivalries, the jealousies, and animosities which pervade the different nations of Europe, and prevent, to a considerable extent, a mutual interchange of scientific investigations, we receive at once, and cordially, every new idea or original principle, come from where it may, and forthwith subject it to the ordeal of experiment and observation for ourselves; and from the extensive circulation of European as well as American periodicals, among the better informed members of our profession, every discovery in France, Germany, or England, is immediately made known and reduced to practice in this country.

But I do not wish or intend to be understood, in referring to the general want of originality in the development of new principles or the establishment of new modes of practice, to withhold from the exertions of many of our professional brethren the full meed of praise due to their genius and industry. American medicine can at least claim the merit of having fully investigated, with zeal, accuracy, and skill, the various diseases which are peculiar to our country, as well as the various modifications undergone by those that are common to us and the old world—of having written several most able works on various branches of medi-

cine, which have deserved and obtained an extensive European celebrity—of having established, in 1797, the first medical periodical in the *world*, thus setting an example, to our brethren abroad, of a species of professional reading which has been of the most distinguished service in the extension and advancement of medical science—of having at once adopted, and very often improved, all the important discoveries, remedies, and operations of European physicians and surgeons—and of having, in repeated instances, been the authors of important surgical improvements, and of successfully performing dangerous, ingenious, and novel operations, which had never been attempted by surgeons of the old world.

In illustration of these observations, I would barely refer to the brilliant operations of Mott, (of whom Sir Astley Cooper remarked, that no living surgeon had done more for his profession,) of Physick, of Warren, Mussey, Dudley, and Barton; to the ingenious, profound, and learned productions of Dr. Edward Miller, of New-York, to whom the world is indebted for all that is really useful in the celebrated theory of Broussais, and of whom that not very candid writer remarks: "He (Dr. Miller) was the first to consider the stomach in its true physiological relation. Under his pen, the phenomena of fever and the modus operandi of medicines acquired an interest which they had never had, even in our most celebrated systematic works;" to the classical work of Dr. Jos. M. Smith, on the laws regulating the etiology and pathology of epidemic diseases, and which, for ingenuity of reasoning, profundity of research, and originality of views, has not been surpassed by any

work on that subject, in any language; and, in fine, by reference to the investigations and writings of Rush, Godman, Hosack, Beck, and many others.

The profession in this country labors under the disadvantage of being left entirely to its own resources for the prosecution of medical education; receiving none of that fostering aid and support from Government which have been so instrumental in establishing all the great medical universities of Europe. With the exception of the parsimonious grant of a few thousand dollars, in two or three of the States, nothing, literally nothing, has been done by the public for this most important object. Every thing that has been accomplished in the establishment of schools, in procuring anatomical museums, libraries, apparatus, &c., has been the result solely of private professional enterprise and liberality; while hundreds of thousands of dollars have been expended on the splendid institutions of Europe—of Berlin, of Paris, of Vienna, of London; and while, even in this country, large sums have been lavished on theological and literary academies of various kinds, (and to all this I make no objection, but wish it were a hundred fold greater,) hardly a cent has been voted by any legislature towards one of the most expensive as well as most useful of literary enterprises—for it must be recollected that all the various *materiel* of a large medical school cannot be obtained without a very heavy expenditure. May we not hope that this state of things will not always exist? That a proper sense of what is due to the profession—to the cause of science—to the interests of humanity—to their own honor—will at length awaken the slumbering energies of our State

Governments and other public bodies, and that liberal appropriations will hereafter be made to medical as well as other literary institutions?

I have thus, gentlemen, presented you a sketch, necessarily a very imperfect one, of some features of the present state of our profession in the principal countries of Europe and among ourselves. I have said that there were defects in our mode of prosecuting medical inquiries, or rather that there were some departments of professional research which are not pursued in this country with that zeal and ardour and perseverance which their importance demands. And to whom are we to look, to wipe this reproach from our national character? Must it not be to *you*, in common with the other youthful members of the profession, who are just entering the boundless field of medical science, and are perchance looking forward, with the natural buoyancy of youth and of hope, to gathering from its ample domain a rich harvest of pecuniary emolument and scientific reputation? To you, who have yet to decide in what corner of this vast and still unexplored region you will thrust in the sickle—and with an industry that shall never tire, and a devotion that shall never flag,

"From morn till night, from youth till hoary age,"

glean may a grain and collect many a sheaf which have escaped the notice or eluded the search of former laborers?